Rhodora

JOURNAL OF

THE NEW ENGLAND BOTANICAL CLUB

Vol. 4 February, 1902 No. 38

THE MAINE COAST AT CUTLER.

G. G. Kennedy.

The flora of Mt. Desert has been so well described in Rand & Redfield's volume that the list there given might be considered sufficient for the whole seashore of Maine, but to the eastward lies an almost unexplored territory with a more boreal flora and cold winds and waters.

The innumerable islands, bays and rivers of the Maine coast do not extend eastward beyond Machias Bay, and from this point to Quoddy Head, a distance of about 25 miles, we have a bold shore with a full east exposure, open ocean, treacherous currents, and much fog. It is the entrance to the Bay of Fundy and from fifteen to twenty miles off shore lies Grand Manan Island with its cliffs and fog. The Bay of Fundy, some sixty miles wide at its mouth, extends one hundred and fifty miles northeasterly, and uninfluenced by warmer currents from the southern ocean areas, maintains its well-earned reputation as a cold wet sea.

This twenty-five miles of coast is shared by three townships, Cutler, Trescott and Lubec, or to take the shore designations proper for such a sea-faring community, Little River, Bailey's Mistake and Quoddy Head; Lubec village lying on the narrow strait north of Quoddy Head.

A short account of the flora of the region as observed during three days spent in July last at Cutler on Little River, may be interesting to the readers of Rhodora.

Little River is a small fiord just east of Little Machias Bay with a sailing area of less that a mile from Little River Light. Its situation is 44° 40′ N. and 67° 15′ W. of Greenwich. The village of Cutler is on this fiord and its picturesque beauty has been described in several magazine articles on the coast of Maine.

My first walk from the hotel towards the shore at Schooner Head showed how northern the vegetation looked and how much it reminded one of the Lower St. Lawrence at the Saguenay region. *Abies balsamea*, Miller, and *Picea alba*, Link, fruiting when only 10 to 15 ft. high grow quite to the water's edge; one group of white spruces from which I collected the seashore moss *Ulota phyllantha*, Brid., stretched its branches over water many feet deep which beat about the base of the cliff, wetting the halophilous moss, *Grimmia maritima*, Turner, with its spray, while *Empetrum nigrum*, L., in deep cushions and *Lonicera caerulea*, L., in breast-high bushes covered the ground. On the rocky beach grew another Saguenay-Tadousac plant, *Iris Hookeri*, Penny, cited in Britton's new Manual as found on "River shores Newfoundland to Quebec and Maine"; but I think Prof. Macoun is right when he says in Cat. Can. Plants, Vol. II. p. 25, "Apparently peculiar to the sea coast and always found within the limit of the spray from the sea." All Macoun's stations are marine and this station at Cutler extends its limits from the Gulf of St. Lawrence around the coast to the United States. Fernald's No. 147 Maine Flora on which perhaps the Maine citation for *I. Hookeri* is founded is a plant with a very small pod but the beak of true *I. versicolor*.

On this rocky beach grew also a tall, slender dark green *Sagina nodosa*, Fenzl, which on examination proved to be different from our usual New England plant in being quite glabrous, and thus exactly like the Tadousac plant. It is the true *Sagina nodosa* of Europe, and all our other New England specimens appear to be the var. *pubescens* of Koch, while all the specimens in the Gray Herbarium from north of the United States, including one from Isle Royale, Lake Superior, are the true *S. nodosa*. The var. *pubescens* I found also at Cutler and perhaps the two forms on the coast do not intrude on each other's territory, as the glabrous plant has not before this been reported from New England, while the var. *pubescens*, though cited as rare in the Mt. Desert Flora, is quite common at Biddeford Pool, Me., and other points on the coast south to Massachusetts.

The seashore Plantagos are sufficiently troublesome, but one little Tadousac plant attracted my notice immediately — the *Plantago borealis*, Lange, described in Flora Danica, Vol. XVI. t. 2707, and recorded from Greenland and Iceland and extreme northern Norway. It does not appear to have been separated by Macoun in his Cata-

logue of Canadian plants, but in Contributions from the Herbarium of the Geological Survey of Canada, xi. (reprinted from Can. Rec. Sci. 1897) 475, Mr. James M. Macoun refers various Labrador and Hudson Bay specimens to *P. borealis* although no mention is made of any Gulf of St. Lawrence specimens. I collected it at Tadousac in Aug., 1892, and the Gray Herbarium has it from various stations in Labrador, but not from the United States.

The *Plantago decipiens*, Barneoud, from Cutler exactly matches the original description in being extremely woolly on the scape just below the inflorescence and somewhat woolly at base, with flat linear leaves about equalling the scapes. The varying forms of *Plantago decipiens* and *P. maritima* on the New England coast should be carefully collected for future study.

While coming from the shore one evening we crossed a pasture and in a wet place under the alders collected a *Hieracium* new to me which proves to be *H. floribundum*, Wimmer and Grabouski, a well known species of central Europe. This plant is new to the United States, and doubtless an importation from Europe, though Cutler is not exactly a port of entry; yet the plant was growing quite luxuriantly under the alder bushes.

In a wet place near the shore but not in salt marsh grew a very robust *Poa* about 3 dm. high and with a culm 2 mm. or more thick. I thought I had *Poa alpina*, L., but it proved to be *P. pratensis*, L., var. *domestica*, Laestad.: the arctic *Poa pratensis* has five varieties affixed to it in Lange's Greenland Flora and the Cutler specimen exactly matches authentic Greenland and Iceland specimens in the Gray Herbarium of var. *domestica*. It has a Briza-like appearance from the large spreading spikelets and as they are of a violet green color the plant is quite striking. Lange says of it, "not unlike *Poa alpina*."

A curious feature of the rocky shore at Corbett's Point is a series of small basins in the ledgy rocks holding fresh spring water: Mr. Corbett told us that during the extreme drought of the summer of 1900 he found his cow never cared for water on her return from pasture, although her usual drinking place was absolutely dry. Out of curiosity he one day followed her to the pasture and saw her go to the shore and drink from one of these basins, and this she continued to do all summer. These basins are of different sizes, from an area of two square feet to only a few inches, and a dozen or more

in number. They all contain the larvae of fresh water insects and thus differ from the similar salt water basins on the same rocks in which are various seaweeds, and yet both sets of basins are only just above high water mark and must be often washed by the sea spray. There are no higher springs visible from which their supply could be explained, and yet each basin has a gentle weeping outlet, while the basins are not all on the same level. In one of these little outlets I found the specimen of *Sagina nodosa*, var. *pubescens*, also the true *Galium trifidum*, L., with very thick leathery leaves, and *Euphrasia Randii*, Robinson, the latter having previously been found only on the islands south of Mt. Desert; while in a mossy place in the woods I collected *Euphrasia Americana*, Wettst. (See RHODORA III. pp. 273 and 274.)

We remained at Cutler in a quiet summer hotel from Saturday noon, July 13th, to Tuesday noon, July 16th. Although not on a botanical trip I had my press along, and the few plants I brought home may give some idea of what might be found by a collector who should devote himself to this wild and unexplored shore.

NOTEWORTHY PLANTS OF SOUTHEASTERN CONNECTICUT,—III.

C. B. GRAVES.

(For previous articles of this series, see RHODORA, I, 67; III, 63.)

I AM indebted to Prof. F. Lamson-Scribner and Mr. E. D. Merrill for verifying the grasses mentioned below, and to Dr. B. L. Robinson and Mr. M. L. Fernald for assistance upon some of the other species. Those marked with one star are now, I believe, for the first time listed from Connecticut. Those with two stars have not, so far as I am aware, been reported from New England before.

* *Paspalum Muhlenbergii* Nash. Open sandy soil, Poquonnoc Plain, Groton.

* * *Panicum stipitatum* Nash. Discovered by Mr. C. H. Bissell and the writer at Selden's Cove in Lyme, Aug., 1901.

* *Agrostis coarctata* Ehrh. In wet sand, edges of salt marsh, Groton. Foliage of growing plant bluish green.